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	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
	10/534,732	05/12/2005	Kwan-suk Yang	DSP-PT008	8992
	3624	7590 04/18/2006	·	EXAM	INER
	VOLPE AND KOENIG, P.C.			PAK, SUNG H	
		7590 04/18/2006			
	30 SOUTH 11	7TH STREET		ART UNIT	PAPER NUMBER
	PHILADELP:	HIA, PA 19103		2874	
			DATE MAILED: 04/18/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)				
	10/534,732	YANG, KWAN-SUK				
Office Action Summary	Examiner	Art Unit				
•	Sung H. Pak	2874				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 12 h	<u>May 2005</u> .					
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Thi	is action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-14 is/are pending in the application	n.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-14</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/	or election requirement.	•				
Application Papers		·				
9)⊠ The specification is objected to by the Examin	er.					
10)⊠ The drawing(s) filed on <u>12 May 2005</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the E	Examiner. Note the attached Off	ice Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)⊠ All b)□ Some * c)□ None of:						
1.⊠ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
• •	application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a lis	st of the certified copies not rece	eived.				
	·					
Attachment(s)		· .				
1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) 💹 Interview Summ Paper No(s)/Ma					
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date <u>3/24/06</u> .		al Patent Application (PTO-152)				

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#### **DETAILED ACTION**

Preliminary amendment received on 5/12/2005 has been entered. Claims 1-14 are now pending.

# Information Disclosure Statement

Information disclosure statement received on 3/24/2006 has been considered.

# Specification

The abstract of the disclosure is objected to because the abstract is generally limited one paragraph, under 150 words. Correction is required. See MPEP § 608.01(b).

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 5, 7, 11, 13 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 60-250312 A (JP '312).

JP '312 reference discloses an optical device with all the limitations set forth in the claims, including: an optical contact module for connecting a single optical fiber for transmitting an optical signal to an optical device such as a light emitting device or a light receiving device,

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which comprises: an optical device receiving member ('6' Fig. 3) including an optical device receiving portion ('62' Fig. 3) formed with an optical device receiving space for receiving the optical device ('8' Fig. 3) therein from one end of the optical device receiving member, an optical fiber receiving portion ('61' Fig. 3) formed with an optical fiber receiving space for receiving an optical fiber therein from the other end thereof, a contact hole having a predetermined diameter to communicate the optical device receiving portion with the optical fiber receiving portion ('61d' Fig. 3), and a slit formed in the optical fiber receiving portion by removing a portion of an outer periphery of the optical fiber receiving portion by a predetermined length from the other end ('61b' Fig. 2); an optical fiber fixing cap ('7' Fig. 3) including a receiving portion which has a taper formed lengthwise ('71b' Fig. 3) such that the inner diameter of the receiving portion can be decreased to radially press the optical fiber receiving portion formed with the slit when the optical fiber receiving portion of the optical device receiving member is to be received therein from one end of the optical fiber fixing cap (Fig. 4), and a through-hole at the other end thereof so that the optical fiber can be inserted into the receiving portion (Fig. 2-3); and a fastening means formed on the outer periphery ('61a' Fig. 2-3) of the optical fiber receiving portion of the optical device receiving member and on an inner periphery of the receiving portion of the optical fiber fixing cap to detachably fasten the optical fiber fixing cap to the optical device receiving member (Fig. 4);

wherein there is a projection portion extending lengthwise from a distal end of the optical device receiving portion of the optical device receiving member ('62' Fig. 3); wherein the optical fiber receiving portion of the optical device receiving member is formed with a taper such that the outer diameter of the optical fiber receiving portion is increased from a distal end thereof,

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and a plurality of slits are formed circumferentially at a predetermined interval in the optical fiber receiving portion (Fig. 4- taper is formed when the fixing cap '7' is in place);

wherein a step is formed due to the outer diameter of the optical device receiving portion of the optical device receiving member larger than that of the optical fiber receiving portion thereof (Fig. 3);

wherein the fastening means comprises male threads (which are plurality of ridges) formed on the outer periphery of the optical fiber receiving portion of the optical device receiving member and female threads (which are coupling ridges) formed on the inner periphery of the receiving portion of the optical fiber fixing cap (Fig. 2-3; abstract).

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3-4, 6, 8-10, 12, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 60-250312 A (JP '312).

JP '312 reference discloses an optical device with limitations set forth in the claims as discussed above, except it does not explicitly teach the use of an elastic member disposed in the optical fiber receiving portion for supporting optical fibers. Also, it does not teach the use of an O-ring fitted around the outer periphery of the optical fiber receiving portion as claimed.

However, the use of an elastic material disposed in the optical fiber receiving portions of optical connectors are well known and common in the art. Such elastic materials are commonly used in the art to provide mechanical protections for the fragile coupling fibers, which are exposed near the coupling junction. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the device of JP '312 to have elastic material disposed in the fiber receiving portion.

In addition, the use of an O-ring in the fiber-to-device connector is well known and common in the art. Such O-rings are considered advantageous and desirable in the art because it allows for a tight and secure fit for connector structure to be mounted on a connector panel.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the device of JP '312 to have O-ring disposed on the fiber receiving portion as claimed.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sung H. Pak whose telephone number is (571) 272-2353. The examiner can normally be reached on Monday- Friday, 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571)272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sung H. Pak

Primary Patent Examiner

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